



Esc

9. What would the implications of having a greater level of bandwidth be?

Greater physician comfort with the technology  
in all medical specialties/applications

10. Do you have e-mail? No \_\_\_\_\_ Yes \_\_\_\_\_

Don't Know

11. Do you have Internet access? No \_\_\_\_\_ Yes \_\_\_\_\_

If yes, do you incur long-distance charges by using it?

No \_\_\_\_\_ Yes \_\_\_\_\_

Please estimate your number of hours of internet use per month:

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:

## TELEMEDICINE USER SURVEY

1. Name of project:

Upper Peninsula Telemedicine Network

2. Please list each of the project's sites:

Name of Site:

State in which it is located:

<u>Marquette Medical Clinic (MMC) - Kingsford</u>	<u>Michigan</u>

Please answer the following questions for each of your sites. Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?

City: Saginaw, MI Distance from city boundary: 387 mi.

4. Name of the project's telecommunications service provider:

Ameritech - local AT&T - long distance

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

~~128 Kbps~~ - ~~384 Kbps~~ POTs for ~~telemedicine~~

6. Charges for telecommunications service:

Is there a monthly charge? No    Yes X  
If yes, how much is the charge? 1 BR ISDN \$235/mo 128 Kbps

King

Is there a usage-based charge? No X Yes \_\_\_\_\_  
 If yes, how much is the charge? \_\_\_\_\_

Is there a distance component (such as a per-mile fee) of the charge?

No \_\_\_\_\_ Yes X

If yes, how much is the charge? 1 BR ISDN ~\$3/mi, 128 Kbps, Net ~ 12.88 mi

Was there an installation fee? No \_\_\_\_\_ Yes X

If yes, how much is the charge? ISDN \$817+

Is the charge the regular tariffed rate, or is there a discount from the telecommunications provider? Tariffed X Discount \_\_\_\_\_

If there is a discount, how much is it? \_\_\_\_\_

7. How does the project use telecommunications in the delivery of health care? (For example -- to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

Video Conference - physician & allied care provider education  
- home health & hospice  
- Upper Michigan Depts of Public Health  
- Rural Health Outreach Project  
- Regional HIV/AIDS group

8. <sup>①</sup> Could the project provide the services it is currently providing with less bandwidth? What effect would a lesser level of bandwidth have? (The implications of using greater or lesser levels of telecommunications services are related to image transmission time. <sup>②</sup> What would be the impact if the health care activities for which you now use telecommunications took twice as long, or if <sup>③</sup> they could be completed in half the time?)

<sup>①</sup> We use the lowest bandwidth available for our applications.  
ISDN transmission 128 Kbps was chosen due to high  
cost alternatives and wide bandwidth

<sup>②</sup> We function at the lowest bandwidth

<sup>③</sup> Decreasing the time to accomplish activities would be  
looked on favorably. We may even discover new cost  
saving applications with improved video

King

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10. Do you have e-mail? No \_\_\_\_\_ Yes \_\_\_\_\_

Don't Know

11. Do you have Internet access? No \_\_\_\_\_ Yes \_\_\_\_\_

If yes, do you incur long-distance charges by using it?

No \_\_\_\_\_ Yes \_\_\_\_\_

Please estimate your number of hours of internet use per month:

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:

## TELEMEDICINE USER SURVEY

1. Name of project:

Upper Peninsula Telemedicine Network

2. Please list each of the project's sites:

Name of Site:

State in which it is located:

Crystal Falls Community  
HospitalMichigan

Please answer the following questions for each of your sites. Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately, how far are you from its boundary?

City: Saginaw MI Distance from city boundary: 18 mi.

4. Name of the project's telecommunications service provider:

Ameritech - local AT&T - long distance

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

128 Kbps - ~~384 Kbps~~ ~~POTS for telemedicine~~

6. Charges for telecommunications service:

Is there a monthly charge? No      Yes XIf yes, how much is the charge? 1 BR ISDN \$183/mo 128 Kbps

2 Quote only from Ameritech  
Iron County Community Hospital  
16 mi away is \$261/mo, \$3/mi.  
Crystal Falls another not yet installed.

## TELEMEDICINE USER SURVEY

1. Name of project:

Upper Peninsula Telemedicine Network

2. Please list each of the project's sites:

Name of Site:

State in which it is located:

Iron County Community Michigan  
Hospital

Please answer the following questions for each of your sites. Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?

City: Saginaw, MI Distance from city boundary: 433 mi

4. Name of the project's telecommunications service provider:

Ameritech - local AT&T - long distance

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

128 Kbps - 384 Kbps POTS for teleaudiology

6. Charges for telecommunications service:

Is there a monthly charge? No

Yes X

If yes, how much is the charge?

1 BR ISDN \$261/mo 128 Kbps

12

Is there a usage-based charge? No X Yes \_\_\_\_\_  
 If yes, how much is the charge? \_\_\_\_\_

Is there a distance component (such as a per-mile fee) of the charge?

No \_\_\_\_\_ Yes X

If yes, how much is the charge? 1 BR ISDN ~ \$3/mi, 128 Kbps Mt ~ 12 88mi

Was there an installation fee? No \_\_\_\_\_ Yes X

If yes, how much is the charge? ISDN \$817+

Is the charge the regular tariffed rate, or is there a discount from the telecommunications provider? Tariffed X Discount \_\_\_\_\_

If there is a discount, how much is it? \_\_\_\_\_

7. How does the project use telecommunications in the delivery of health care? (For example -- to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

Video Conference - physician & allied provider education  
community health ed - Breast  
Cancer Support group

Teleradiology - ultrasound, X-ray, CT & MRI

8. <sup>①</sup> Could the project provide the services it is currently providing with less bandwidth? What effect would a lesser level of bandwidth have? (The implications of using greater or lesser levels of telecommunications services are related to image transmission time. <sup>②</sup> What would be the impact if the health care activities for which you now use telecommunications took twice as long, or if

<sup>③</sup> they could be completed in half the time?)

<sup>①</sup> We currently use the lowest bandwidth available for our applications. ISDN transmission, 128 Kbps, was chosen due to high cost for alternatives and wide bandwidth

<sup>②</sup> We function at the lowest bandwidth!

<sup>③</sup> Decreasing the amount of time to accomplish our applications would be looked on favorably. We may even discover new cost saving applications with improved video



1R

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10. Do you have e-mail? No \_\_\_\_\_ Yes \_\_\_\_\_

Don't Know

11. Do you have Internet access? No \_\_\_\_\_ Yes \_\_\_\_\_

If yes, do you incur long-distance charges by using it?

No \_\_\_\_\_ Yes \_\_\_\_\_

Please estimate your number of hours of internet use per month:

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:

## TELEMEDICINE USER SURVEY

1. Name of project:

Upper Peninsula Telemedicine Network

2. Please list each of the project's sites:

Name of Site:

State in which it is located:

Grand View Health Systems Michigan  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please answer the following questions for each of your sites. Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?

City: Saginaw, MI Distance from city boundary: 499 mi

4. Name of the project's telecommunications service provider:

Ameritech - local AT&T - long distance

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

~~128 Kbps~~ - 384 Kbps POTS for ~~telemedicine~~

6. Charges for telecommunications service:

Is there a monthly charge? No

Yes X

If yes, how much is the charge?

3 BR ISDN \$849/mo, 384 Kbps↑ Quote from Ameritech,  
System not yet installed

1W

Is there a usage-based charge? No X Yes \_\_\_\_\_  
 If yes, how much is the charge? \_\_\_\_\_

Is there a distance component (such as a per-mile fee) of the charge?

No \_\_\_\_\_ Yes X

If yes, how much is the charge? 3 BR ISDN ~ \$2/hr, 384 Kbps, 145 mi

Was there an installation fee? No \_\_\_\_\_ Yes X

If yes, how much is the charge? ISDN \$817+ x 3 = \$2,451+

Is the charge the regular tariffed rate, or is there a discount from the telecommunications provider? Tariffed X Discount \_\_\_\_\_

If there is a discount, how much is it? \_\_\_\_\_

7. How does the project use telecommunications in the delivery of health care? (For example -- to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

Video Conference - System has not yet been installed.

8. Could the project provide the services it is currently providing with less bandwidth? What effect would a lesser level of bandwidth have? (The implications of using greater or lesser levels of telecommunications services are related to image transmission time. What would be the impact if the health care activities for which you now use telecommunications took twice as long, or if they could be completed in half the time?)

- ① We will be using the lowest bandwidth available for our applications. ISDN transmission 128 Kbps was chosen due to high cost for alternatives and wide bandwidth.
- ② We function at the lowest bandwidth!
- ③ Decreasing the amount of time to accomplish our applications would be looked on favorably. We may even discover new cost saving applications with improved video.

1W

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10. Do you have e-mail? No \_\_\_\_\_ Yes \_\_\_\_\_

Don't Know

11. Do you have Internet access? No \_\_\_\_\_ Yes \_\_\_\_\_

If yes, do you incur long-distance charges by using it?

No \_\_\_\_\_ Yes \_\_\_\_\_

Please estimate your number of hours of internet use per month:

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:

## TELEMEDICINE USER SURVEY

1. Name of project:

Upper Peninsula Telemedicine Network

2. Please list each of the project's sites:

Name of Site:

State in which it is located:

Ontonagon Memorial Hospital Michigan  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please answer the following questions for each of your sites. Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?

City: Saginaw, MI Distance from city boundary: 469 mi

4. Name of the project's telecommunications service provider:

Ameritech collaborates with Ontonagon County  
Telephone Company - local AT&T - long distance

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

128 Kbps - 384 Kbps POTs for telemedicine

6. Charges for telecommunications service:

Is there a monthly charge? No

Yes X

If yes, how much is the charge?

1 BR ISDN \$223/mo 128 Kbps

Ent

Is there a usage-based charge? No X Yes \_\_\_\_\_

If yes, how much is the charge? \_\_\_\_\_

Is there a distance component (such as a per-mile fee) of the charge?

No \_\_\_\_\_ Yes XIf yes, how much is the charge? 1 BRISDN ~\$2/mi, 128 Kbps Inet -> Ent 15 miWas there an installation fee? No \_\_\_\_\_ Yes XIf yes, how much is the charge? ISDN \$817+Is the charge the regular tariffed rate, or is there a discount from the telecommunications provider? Tariffed X Discount \_\_\_\_\_

If there is a discount, how much is it? \_\_\_\_\_

7. How does the project use telecommunications in the delivery of health care? (For example -- to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

Video Conference - physician & allied provider education

8. Could the project provide the services it is currently providing with less bandwidth? What effect would a lesser level of bandwidth have? (The implications of using greater or lesser levels of telecommunications services are related to image transmission time. What would be the impact if the health care activities for which you now use telecommunications took twice as long, or if they could be completed in half the time?)

- ① We currently use the lowest bandwidth available for our applications. ISDN transmission, 128 Kbps, was chosen due to high cost for alternatives and wide bandwidth
- ② We function at the lowest bandwidth!
- ③ Decreasing the time to accomplish our applications would be looked on favorably. We may even discover new cost saving applications with improved video.

Ont

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10. Do you have e-mail? No \_\_\_\_\_ Yes \_\_\_\_\_

Don't Know

11. Do you have Internet access? No \_\_\_\_\_ Yes \_\_\_\_\_

If yes, do you incur long-distance charges by using it?

No \_\_\_\_\_ Yes \_\_\_\_\_

Please estimate your number of hours of internet use per month:

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:

## TELEMEDICINE USER SURVEY

1. Name of project:

Upper Peninsula Telemedicine Network

2. Please list each of the project's sites:

Name of Site:

State in which it is located:

Portage Health System Michigan

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please answer the following questions for each of your sites. Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?

City: Saginaw, MI Distance from city boundary: 454 mi

4. Name of the project's telecommunications service provider:

Ameritech - local AT&T - long distance

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

128 Kbps - 384 Kbps POTs for Telemedicine

6. Charges for telecommunications service:

Is there a monthly charge? No

Yes X

If yes, how much is the charge?

3 BR ISDN \$1024/mo 384 Kbps





Han

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10. Do you have e-mail? No \_\_\_\_\_ Yes \_\_\_\_\_

Don't Know

11. Do you have Internet access? No \_\_\_\_\_ Yes \_\_\_\_\_

If yes, do you incur long-distance charges by using it?

No \_\_\_\_\_ Yes \_\_\_\_\_

Please estimate your number of hours of internet use per month:

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:

## TELEMEDICINE USER SURVEY

1. Name of project:

Upper Peninsula Telemedicine Network

2. Please list each of the project's sites:

Name of Site:

State in which it is located:

Keweenaw Memorial Medical Center Michigan

Please answer the following questions for each of your sites. Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?

City: Saginaw, MI Distance from city boundary: 467 mi

4. Name of the project's telecommunications service provider:

Ameritech - local AT&T - long distance

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

128 Kbps - 384 Kbps POTS for Telemedicine

6. Charges for telecommunications service:

Is there a monthly charge? No \_\_\_\_\_ Yes XIf yes, how much is the charge? 1 3R ISDN \$203/mo 128 Kbps<sup>2</sup>Quote from Ameritech,  
System not yet installed

Ken

Is there a usage-based charge? No X Yes \_\_\_\_\_

If yes, how much is the charge? \_\_\_\_\_

Is there a distance component (such as a per-mile fee) of the charge?

No \_\_\_\_\_ Yes XIf yes, how much is the charge? 1 BR ISDN ~ \$2/mi 128 Kbps Net - Leominster 13-Was there an installation fee? No \_\_\_\_\_ Yes XIf yes, how much is the charge? ISDN \$817+Is the charge the regular tariffed rate, or is there a discount from the telecommunications provider? Tariffed X Discount \_\_\_\_\_

If there is a discount, how much is it? \_\_\_\_\_

7. How does the project use telecommunications in the delivery of health care? (For example -- to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

Video Conference - System has not yet been installed

8. ② Could the project provide the services it is currently providing with less bandwidth? What effect would a lesser level of bandwidth have? (The implications of using greater or lesser levels of telecommunications services are related to image transmission time. What would be the impact if the health care activities for which you now use telecommunications took twice as long, or if ③ they could be completed in half the time?)

① We will use the lowest bandwidth available, ISDN, 128Kbps due to high cost alternatives.

② We will be using the lowest bandwidth possible

③ Decreasing the time to accomplish our applications would be looked on favorably. We may even discover new cost saving applications with improved video.

Kew

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10. Do you have e-mail? No \_\_\_\_\_ Yes \_\_\_\_\_

Don't Know

11. Do you have Internet access? No \_\_\_\_\_ Yes \_\_\_\_\_

If yes, do you incur long-distance charges by using it?

No \_\_\_\_\_ Yes \_\_\_\_\_

Please estimate your number of hours of internet use per month:

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:

## TELEMEDICINE USER SURVEY

1. Name of project:

Upper Peninsula Telemedicine Network

2. Please list each of the project's sites:

Name of Site:

State in which it is located:

Baraga County Memorial Michigan  
Hospital

Please answer the following questions for each of your sites. Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?

City: Saginaw, MI Distance from city boundary: 422 mi

4. Name of the project's telecommunications service provider:

Ameritech collaborates with Baraga County  
Telephone Company - local service; ATN; T - long distance

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

128 Kbps - ~~384 Kbps~~ POTS for telemedicine

6. Charges for telecommunications service:

Is there a monthly charge? No            Yes X  
If yes, how much is the charge? 1 B2 ISDN \$203/mo 128 Kbps

Bar

Is there a usage-based charge? No X Yes \_\_\_\_\_  
 If yes, how much is the charge? \_\_\_\_\_

Is there a distance component (such as a per-mile fee) of the charge?

No \_\_\_\_\_ Yes X

If yes, how much is the charge? 1 BR ISDN ~ \$3/mi 128 Kbps Mg<sup>1</sup> - L'Anse 67 mi.

Was there an installation fee? No \_\_\_\_\_ Yes X

If yes, how much is the charge? ISDN \$817+

Is the charge the regular tariffed rate, or is there a discount from the telecommunications provider? Tariffed X Discount \_\_\_\_\_

If there is a discount, how much is it? \_\_\_\_\_

7. How does the project use telecommunications in the delivery of health care? (For example — to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

Video Conference - physician & allied provider education  
teledermatology (1)  
pediatric surgical follow-up (1)  
community health ed - Breast cancer  
support group

Teleradiology - ultrasound, X-ray, CT & MRI

8. <sup>①</sup> Could the project provide the services it is currently providing with less bandwidth? What effect would a lesser level of bandwidth have? (The implications of using greater or lesser levels of telecommunications services are related to image transmission time. <sup>②</sup> What would be the impact if the health care activities for which you now use telecommunications took twice as long, or if <sup>③</sup> they could be completed in half the time?)

<sup>①</sup> We currently use the lowest bandwidth available for our applications, ISDN 128 Kbps. due to high cost alternatives

<sup>②</sup> We use the lowest possible bandwidth!

<sup>③</sup> Decreasing the time to accomplish our applications would be looked on favorably. We may even discover new cost saving applications with improved video.

Bar

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10. Do you have e-mail? No \_\_\_\_\_ Yes \_\_\_\_\_

Don't Know

11. Do you have Internet access? No \_\_\_\_\_ Yes \_\_\_\_\_

If yes, do you incur long-distance charges by using it?

No \_\_\_\_\_ Yes \_\_\_\_\_

Please estimate your number of hours of internet use per month:

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:



#20



FAX DATE: 12-20-96 TIME: \_\_\_\_\_

TO: ORREN E. CAMERON III  
RURAL UTILITIES SERVICE

FROM: EDNA DUGGINS

NUMBER OF PAGES (including cover page) 4

MEMO: Telemedicine User Survey

By telephone call on 1/8/97 Edna  
Duggins authorized release of this  
information to the public. Ed Cameron, POS

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